SUPERGUARD
GPS VEHICLE SECURITY SYSTEM

---------- Operation Manual ----------

Compact GPS/GPRS Car Alarm **Model SG-VT02 QB**

Thank you for purchasing the SuperGuard GPS/ GPRS Car Security and Tracking device. Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

Warranty

The Yield Technology Co., Ltd. (YTC) warrants to the purchaser that this product, under normal use and conditions, will be free from defects in materials and workmanship for a period of 12 months from the date of original purchase. If a product proves defective during this warranty period, YTC, at its option, either will repair the defective product without charge for parts and labor, or will provide an exchange for the defective product.

In order to obtain service under this warranty, the purchaser must notify YTC of the defect before the expiration of the warranty period and make suitable arrangements for the performance of service. The purchaser shall be responsible for appropriate packaging and shipping with a carrier designated by YTC, with shipping charges paid by recipient (YTC).

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care, alterations, mishandling or accidents. YTC shall not be obligated to furnish service under this warranty to costs incurred for installation, to correction of antenna problems, removal or reinstallation or to damage to video tapes, discs, speakers, accessories or vehicle electrical system.

The extend of YTC's liability under this warranty is limited to the repair or replacement provided above and, in no event, shall the company's liability exceed the purchase price paid for this product.

THIS WARRANTY IS GIVEN BY YTC IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED. YTC AND ITS VENDORS DISCLAIM ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. YTC'S RESPONSIBILITY TO REPAIR OR REPLACE DEFECTIVE PRODUCTS IS THE SOLE AND EXCLUSIVE REMEDY PROVIDED TO THE PURCHASER FOR BREACH OF THIS WARRANTY. YTC AND ITS VENDORS WILL NOT BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IRRESPECTIVE OF WHETHER YTC OR THE VENDOR HAS ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

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1. Parts & Accessories

On receipt of your SuperGuard system, please check that all contents are complete and correct.

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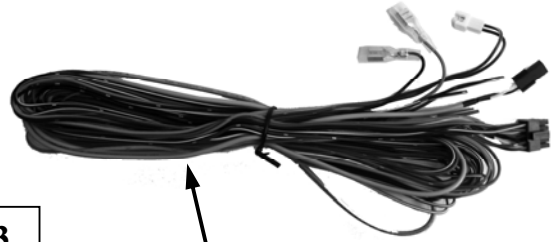

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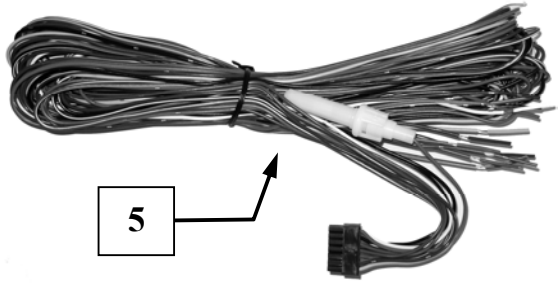

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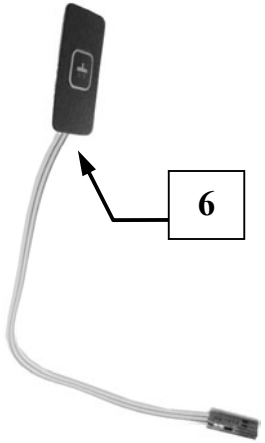

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1. SuperGuard GPS/GPRS Main Unit
2. GPS Aerial
3. GSM Antenna
4. 10-PIN Wiring Harness (CON 1)
5. 14-PIN Wiring Harness (CON 2)
6. SOS Emergency Button
7. 7.2V Rechargeable Li-Ion Battery pack
8. Engine Immobilizer Relay

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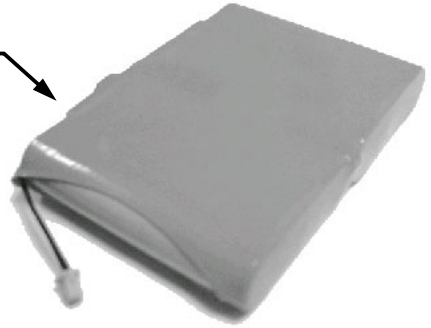

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2. SuperGuard Vehicle Unit – Features

The SuperGuard SG-VT02 is equipped with a variety of basic anti-theft or car alarm features.

- **As an authorized Contact person you can use your GSM phone to activate or disarm vehicle security features through 2-RING and 4-RING phone calls or short message commands. Alternately, you will be able to activate or disarm the Vehicle Unit or query its location and status over Internet Website or GPRS enabled cell phones**
  In addition, you can remote control certain security features, like locking or unlocking the vehicle doors, enabling or disabling engine immobilizer via short message commands

- **If car doors have been opened, your vehicle has been moved or the Vehicle Unit has been cut off from the main power source while the vehicle security is in armed status, car alarm will sound and send alarm messages with GPS positions and status reports to all Contact numbers. You will also be able to track your vehicle on a Website via Internet Explorer or mobile on GPRS enabled cell phones.**

- **The Vehicle Unit comes with one SOS Push Button designed for emergency calls, accidents or hijacking. It should be placed at a hidden place within reach of the driver on the dashboard.**
  The SOS Button will report emergency calls and accidents immediately to Control Base and Contact persons. In addition, existing crash sensors can be applied to automatically report traffic accidents.

- **You will be enabled to setup and configure monitoring activities and alerts to the Vehicle Unit, using Control Base software or Tracking Web services via Internet Explorer or mobile on GPRS enabled cell phones**

- **You can define and load up to 4 restricted areas (Geo-Fence areas) to your device and setup maximum speed limits.**

- **From your Control Base software or over Internet Websites you are able to setup tracking schedules and track vehicles in real time.**

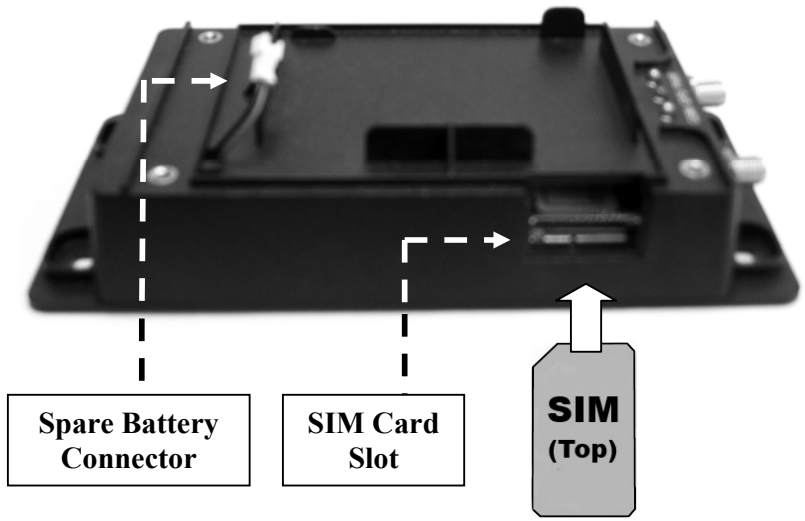
3. Preparations

In order to install the SuperGuard Vehicle Unit properly, the following preparations should be carried out:

Prepare one operational GSM SIM card. Make sure that the SIM card

- **can operate without PIN protection (ask the GSM operator to do this). Ask the GSM operator for the SMSC (SMS Service Center) and Data Call (if applicable) numbers.**
- **Empty the SMS storage of the SIM card using operational GSM phone (please refer your GSM phone manual to do this).**

- **Unscrew and remove the top cover of your Vehicle Unit. Insert the SIM card by sliding it into the SIM slot, with the chip module facing to the bottom side.**
- **Push the SIM card into the slot until it is engaged.**
- **To remove the SIM card, push it in again to release.**



4. Installation

NOTE: Please note that installation methods may vary between vehicle models. For expert wiring and connecting please contact a professional car electronics workshop for installation support and maintenance.

The Vehicle Unit will only operate on 12 V systems with negative earth (Negative to body).

- **Before starting installation, disconnect the vehicle battery and observe other manufacturers safety instructions regarding alarm systems, airbags or anti theft radio coding.**
- **If you want to install the Vehicle Unit in the passenger compartment, make sure that all antenna cables and wiring is protected from sharp edges and is routed in such a manner that it will not be pinched.**
- **The GPS antenna should be positioned at a place where it will have an unobstructed view of the sky. The ideal location is on the inside of the windscreen. The aerial will not work if it is placed beneath metal or metallic glass coatings.**
- **The SOS button should be installed at a place on the dashboard. It should be hidden but easily accessed in emergency cases. To avoid "false alarms" or unintended confusion with other electronic control buttons, it should be placed separate from dashboard controls and car audio devices.**
- **Do not connect the spare battery to the Vehicle Unit before you have completed all electrical wiring and connections to the device.**

Connecting The Vehicle Unit:

NOTE: Finish all wiring and connections to the correct vehicle outputs and inputs before you apply the connectors to the Vehicle Unit !!!

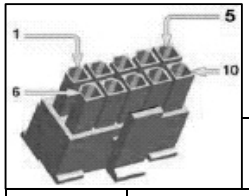
To obtain maximum functionality of your Vehicle Unit you should locate and connect the following electrical output and input wires from the vehicle to the complying pigtails of the Vehicle Unit's CON 1:

- **2 cables to Alarm Siren**

The following wiring needs to be applied to CON 2:

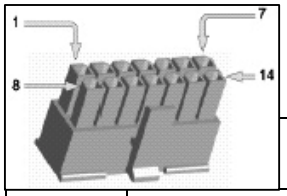
- **2 cables to 12V Power Supply (+ from Vehicle Battery) and GND**
- **1 cable to SOS Emergency Button (Dry Contact)**
- **2 cables from existing Car Alarm (if applicable)**
- **1 cable to interior light (door signal output) – Only use this feature if your automatic dome light switch comes without delay timer**
- **1 cable from ACC Out (+ from ACC+)**
- **1 cable to Engine Relay (plus 2 from Ignition)**
- **Central Lock; Unlock Doors (2 wires: COMM+NO/NC)**
- **Central Lock; Lock Doors (2 wires: COMM+NO/NC)**

When connecting, refer to the cable description for the Vehicle Unit connectors CON 1 and CON 2 according to the wiring diagrams on the following pages.



CON 1: Cable Description and Colors

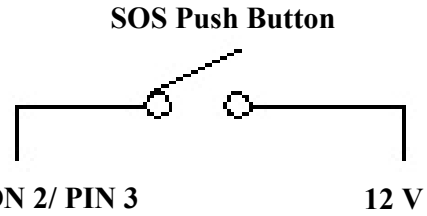
	Cable Description	Color
1	*Optional* (free)	Black/White
2	*Optional* (free)	Red/White
3	*Optional* (free)	Red
4	(free)	Black
5	(*assigned*) Microphone Input (HF+)	Purple
6	Connect to Alarm Siren (COMM)	Blue/White
7	Connect to Alarm Siren (NO)	Blue
8	(*assigned*)Microphone to Ground (GND)	Purple/White
9	(*assigned*) Headset Speakers (HF+)	Green
10	(*assigned*) Headset Speakers (HF-)	Green/White



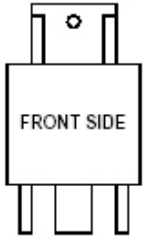
CON 2: Cable Description and Colors

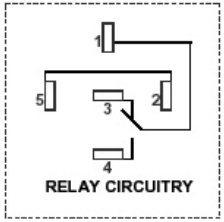
	Cable Description	Color
1	+12V Battery Power Input (+)	Red
2	Power Ground (GND)	Black
3	Connect to SOS Emergency Button (+)	Blue
4	Arm Switch (from existing Car Alarm)	Brown
5	Disarm Switch (from existing CarAlarm)	Brown/White
6	Connect to Interior Light (if no delay timer)	Purple
7	ACC (+12V)	Yellow
8	Immobilizer Relay (+)	White
9	Door Unlock (NO)	Purple/White
10	Door Unlock (COMM)	Grey
11	Door Unlock (NC)	Black/White
12	Door Lock (NO)	Red/White
13	Door Lock (COMM)	Green/White
14	Door Lock (NC)	Green

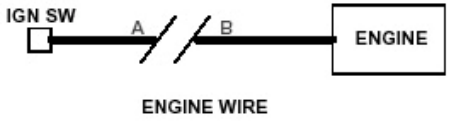
Installation of SOS Emergency Push Button



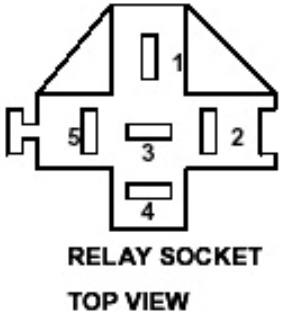
Installation of Relay for Immobilizer function:







To apply the Engine Enable/ Disable Relay, connect the following cables from the relay socket:



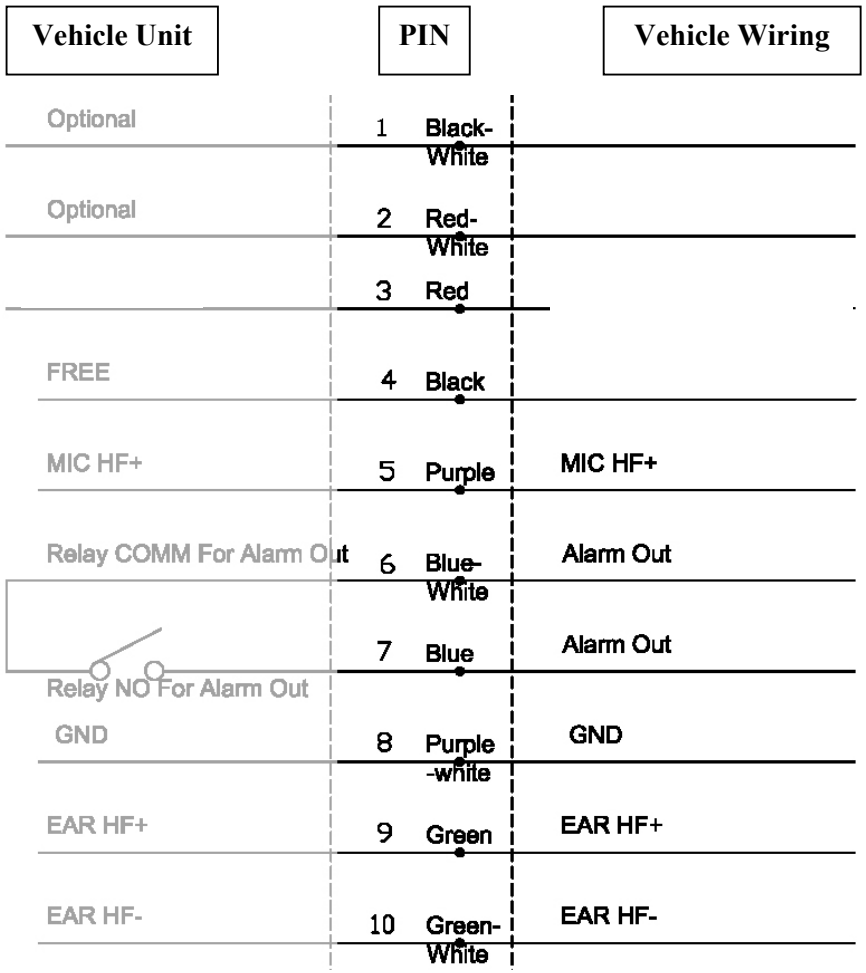
1. **Black: Connect to one end of Ignition line (A)**
2. **White: Connect to Vehicle Unit, CON 1; PIN8 (White)**
3. ***Middle*: Connect to engine end of ignition line (B)**
4. ***Free***
5. **Yellow: Connect to ACC**

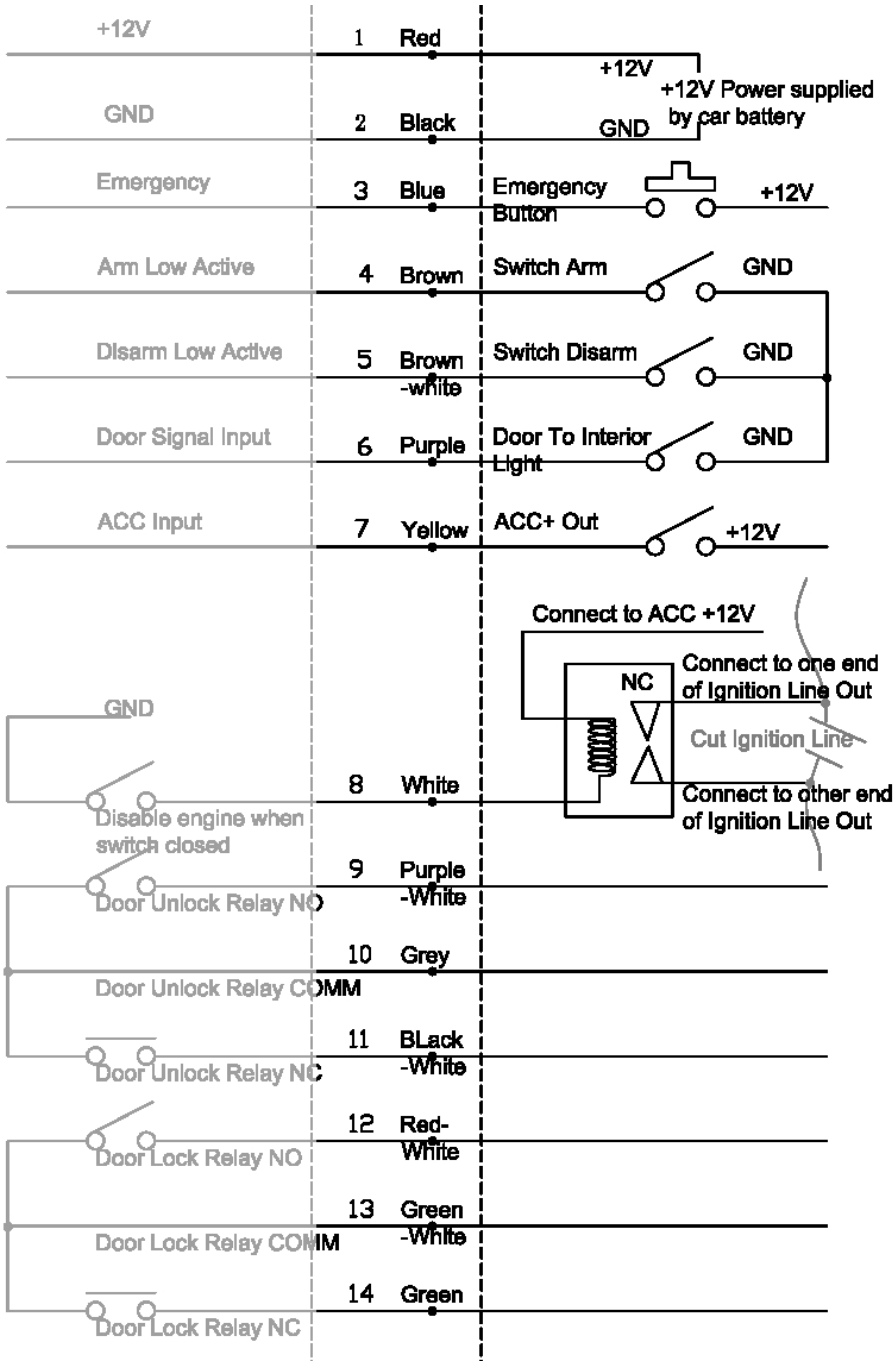
Plug the Relay into the Relay Socket to connect.

CON 1 Wiring Diagram (CON 2 see opposite side)

- **When laying the wiring loom**
  - **Try to ' bury' all wiring**
  - **Avoid abrasive corners and sharp edges**
  - **Avoid sharp folding and pinching the cables**

Make sure that the connections have been made correct before you connect the Main Connector to the Vehicle Unit.

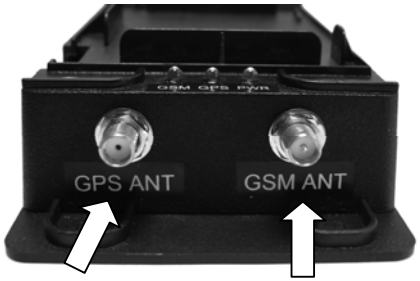




Finish the Installation

- **To ensure that the Vehicle Unit is able to operate even without vehicle battery support, you will need to connect the supplied spare battery to the device.**
- **Insert the battery into the battery compartment and connect both connectors. Close the top cover of the device and fasten it to the unit with the supplied screws.**

- **The GPS Aerial shall be installed either top of the dashboard or close to the rear window of the car, so that it can see the sky. It will pick up signals through glass and plastic, but will not "see the sky" through metal or other conductive surfaces. To avoid distractions of the GPS signal make sure the distance to metallic objects is at least 10 cm.**



GPS Aerial

GSM Antenna

NOTE: Please note that adhesive sun absorber screens may consist of metal. This can distract or block the GPS signal. In that case the GPS aerial should be mounted outside of the vehicle.

5. Vehicle Unit – LED Indicators

❶ **Power LED (green)**

- If LED flashes:
  Device is powered on

❷ **GPS/ GPRS LED (red)**

- If LED flashes:
  Device has GPS lock
- If LED stays on for a period of time:
  Device is dialing GPRS service. If connected, LED will flash several times if connection to Control Base was successful. Will repeat if not successful.

❸ **GSM LED (green)**

- If LED flashes:
  Device is registered to GSM network, able to send/ receive SMS and place or receive phone calls
- If LED stays on constantly:
  Device is still registering to GSM network, no SIM card inserted or network unavailable
- If LED is off for a period of time:
- Device is communicating with Control Base or Contact numbers

6. Getting Started

After plucking the Main Connector into the Vehicle Unit, the device will power up and automatically attempt to register to GSM network. Provided that your vehicle and the Vehicle Unit's GPS antenna is positioned in an area with clear un-obstructed view of the sky, the device will then start scanning for GPS satellites to obtain its first GPS lock. This first fix can take several minutes.

To use the communication and vehicle security features of the device, some mandatory setup parameters need to be configured from the Control Base software or Tracking Websites before it is able to operate properly.
After setting up a user account at the Control Base, enter the following required SIM card details, SMS and GPRS dial-up information and Contact numbers, before you send them through SMS initialization command to the Vehicle Unit:

Submit all these information to complete the setup of your Vehicle Unit. Once the Vehicle Unit initialization command is received, the alarm siren will sound twice to indicate that the initialization has been completed successfully.

IMPORTANT NOTE: Once your device has been initialized, all following commands sent through the Control Base have to use the same GSM number (Control Center Number). To switch to a different Control Center number at a later time, you will need to send an Initialization command with the modified Control Center number using the original GSM number at the Control Base.

7. Activate/ Disable Vehicle Security

As an authorized Contact person, you are able to activate and disable the vehicle security system either from your GSM cell phone (Caller ID must be enabled), Control Base software or through user account from one of the Tracking Websites.

IMPORTANT NOTE:
Please be aware that all cell phone numbers configured at the Control Base as "Contact 1, 2 and 3" will be able to get notifications and remote control security features of your vehicle that are significant for your vehicle's security, like:

- **Receiving SMS alarms and positions in case of unauthorized moving of vehicle or opening of doors**
- **Receiving SMS notifications in case of car accidents, emergency calls or low battery warnings**
- **Activate or disable the vehicle security remotely by phone call or SMS**
- **Remote command central door locks, disable/ enable engine immobilizer**

- **To activate the car alarm from a cell phone, place a 2-RING phone call (ca. 5 sec.) to the Vehicle Unit number. This will lock the doors, disable the ignition and activate the vibration sensor in the device.**

  Dial Call to Vehicle Unit ➔ 2 Rings ➔Hang Up

  In addition, you will receive an SMS short message from the device, confirming that your vehicle is secured now.

- **To disable the car alarm, place a 4-RING phone call (ca. 10 sec.) to the Vehicle Unit number. This will enable the engine, and deactivate the vibration sensor in the device.**

  Dial Call to Vehicle Unit ➔ 3 Rings… 4 Rings ➔Hang Up

  In addition, you will receive an SMS short message from the device, confirming that your vehicle security is disarmed now

- **To use SMS command to activate the vehicle security, type and send this command to the Vehicle Unit to activate the security system:**

  $ARM,1 ➔ Enter Vehicle Unit Number ➔ Send

- **To use SMS command to disable the vehicle security, type and send this command to the Vehicle Unit to activate the security system:**

  $ARM,0 ➔ Enter Vehicle Unit Number ➔ Send

- **Alternately, you are able to activate or disarm the Vehicle Unit or query its location and status over Internet Website or GPRS enabled cell phones. Please refer to the Software or Web User manuals to do this. Please note that security disable commands sent from the Website will enable ignition and vibration sensor, but not automatically unlock the vehicle doors.**

- **If your Vehicle Unit comes with an operational RF remote control, you can use that remote control to lock and unlock the doors. This will automatically activate or disable the security system as described above.**

NOTE: Only the Contact Numbers and Control Base will be able to process remote commands. Using other cell phones or dial-up software to send commands to the unit will have no effect on the Security System.

Additional Control Commands

Car Owners and Contact persons can use their authorized mobile phone numbers to control the central locking system and lock or unlock the vehicle doors through short message commands.

- **To use SMS command to lock the vehicle doors, type and send this command to the Vehicle Unit:**

  $DOR,1 ➔ Enter Vehicle Unit Number ➔ Send

- **To use SMS command to unlock the vehicle doors, type and send this command to the Vehicle Unit:**

  $DOR,0 ➔ Enter Vehicle Unit Number ➔ Send

Car Owners and Contact persons can use their authorized mobile phone numbers to enable or disable the engine immobilizer via short message commands:

- **To use SMS command to lock the vehicle engine and doors, type and send this command to the Vehicle Unit command:**

  $ENG,1 ➔ Enter Vehicle Unit Number ➔ Send

- **To use SMS command to unlock the vehicle engine and doors, type and send this command to the Vehicle Unit:**

  $ENG,0 ➔ Enter Vehicle Unit Number ➔ Send

NOTE: To use remote control commands from authorized Contact numbers, you will need to enable Caller ID features on your cell phone.

8. Car Alarm/ Anti-Theft Features

As soon as the Security of the SuperGuard Vehicle Unit has been activated, the following car security features will come into effect:

Car Doors Open

- **If the car door has been opened while the Vehicle Unit is in armed status:**
  - **The alarm siren will sound for 30 seconds.**
  - **The Vehicle Unit will send an alarm message with updated GPS positions to the Control Base. The Control Base software will find the street name and closest intersection from a map server and send these details through SMS short messages to a list of up to three authorized Contact persons, with the text (example):**

    Peter's truck is in Roosevelt Blvd., near intersection Madison; GPS Car Alarm: Door Open

  - **If present, users can also track their vehicle on a Website via Internet Explorer or mobile on GPRS enabled cell phones.**

Vehicle is Moving

- **If the car has been moved in armed status (for example, in case of tow-away), the following car alarm features will come into effect:**
  - **The alarm siren will sound for 30 seconds.**
  - **The Vehicle Unit will send an alarm message with updated GPS positions to the Control Base. The Control Base software will find the street name and closest intersection from a map server and send these details through SMS short messages to a list of up to three Contact persons, with the text (example):**

> **Peter's truck is in Madison Ave, near intersection Brixton Rd; GPS Car Alarm: Vehicle Moving**

  - **If present, users can also track their vehicle on a Website via Internet Explorer or mobile on GPRS enabled cell phones.**

Vehicle Battery Cut Off

- **If the Vehicle Unit has been removed or cut from the main power source or the car battery gets too low, the following car alarm features will come into effect:**
  - **The Vehicle Unit will send an alarm message with GPS position to the Control Base.**
  - **The Control Base software will find the street name and closest intersection from a map server and send these details through SMS short messages to a list of up to three authorized Contact persons, with the text:**

> **Peter's truck is in Gatwick Parkway., near intersection Madison; GPS Car Alarm: Main Power Cut**

NOTE: If the vehicle battery has been removed, you will not be able to remote control door locks. To disable vehicle security, you still can either use the supplied Remote Control, place 4-RING call or send $ARM,0 command manually.

Other Security Alarms

- **If the vehicle has been equipped with a standard car alarm system which is connected to the SuperGuard Vehicle Unit, the unit will report to the Control Base, when the existing car alarm goes off:**
  - **The Vehicle Unit will send an alarm message with GPS position to the Control Base.**
  - **The Control Base software will find the street name and closest intersection from a map server and send these details through SMS short messages to a list of up to three authorized Contact persons, and alarm text according to event.**

- **If the ACC ignition wire inside the vehicle has been short-cut while the security system is active, and no "Door Open" alarm has been triggered (for Cabriolets):**
  - **The Alarm Siren will sound for 30 seconds.**
  - **You will receive an alarm text message.**

9. Emergency Alarms

The SuperGuard security system includes special safety features that can save your life in case of accidents, hijacking or emergency cases.

SOS Emergency Call

- **The SuperGuard security system comes with a self-adhesive SOS push button that can be installed at a hidden place within reach of the driver. Pressing this button will start the following actions:**

  - **The Vehicle Unit will send an alarm message and GPS coordinates to the Control Base. The Control Base software will find the street name and closest intersection from a map server and send these details through SMS short messages to all Contact numbers, with the text:**

    Peter's truck is in Madison Ave, near intersection Brixton Rd.; GPS Car Alarm: SOS !

  - **The Vehicle Unit automatically dials a phone call to the main Contact number (Contact 1).**

  - **If applicable, the SOS phone call can be used as "silent call" to allow users or operators to monitor events and sounds in the vehicle.**

  - **Users in the car can hang up the automatic SOS phone call by pressing the SOS button again.**

  - **After placing the SOS phone call, the vehicle unit will automatically start tracking and update GPS positions to the Control Base every 60 seconds over a period of 30 minutes.**

10. Monitoring Activities

Users are able to setup and configure monitoring activities and alerts to the Vehicle Unit, using Control Base software or Tracking Web services via Internet Explorer or mobile on GPRS enabled cell phones.

Geo-Fence Alarms

- **If the Vehicle Unit has been configured with a set of restricted geographic areas (Geo-Fences), the following activities will be triggered when a Geo-Fence violation occurs:**
  - **The Vehicle Unit will send an alarm message and GPS coordinates to the Control Base. The Control Base software will find the street name and closest intersection from a map server and send these details through SMS short messages to a list of up to three authorized Contact persons, with the text:**

> **Peter's truck is in Arlington., near intersection Fairfax Ramp; GPS Car Alarm: GEO Fence Alert**

Over Speed Alarms

- **If the Vehicle Unit has been configured with a maximum speed limit, the following activities will be triggered when the vehicle speed exceeds the speed limit:**

  - **The Vehicle Unit will send an alarm message and GPS coordinates to the Control Base. The Control Base software will find the street name and closest intersection from a map server and send these details through SMS short messages to all Contact numbers, with the text:**

> **Peter's truck is in Highway 166, near intersection Gleebe; GPS Car Alarm: Over Speed**

> ***NOTE: Over Speed Alarms will only be reported if ignition is on and the Vehicle Unit has been connected to ACC (CON 2/ PIN 8).***

Battery Low Warning

- **If no main power source is connected and the included battery pack in the Vehicle Unit runs low on power:**
  - **The Vehicle Unit will send an alarm message and GPS coordinates to the Control Base. The Control Base software will find the street name and closest intersection from a map server and send these details through SMS short messages to all Contact numbers, with the text:**

> **Peter's truck is in Madison Ave., near intersection Brixton Rd.; GPS Car Alarm: Battery Low**

11. Locating and Tracking

Authorized users can interrogate the Vehicle Unit to receive locations, street names and details. If present, they can poll and track their vehicles through Control Base software or Tracking Web services via Internet Explorer or mobile on GPRS enabled cell phones.

Vehicle Tracking

- **From the Control Base software, over Internet from the Tracking Website or GPRS enabled cell phones, you are able to receive updated GPS locations any time and display them on a map, and view Tracking history and results over unlimited time.**

- **From the Control Base or Websites, you are also able to setup Tracking schedules for periods up to 45 days, in intervals between 30 seconds and 17 hours.**

- **You can start and end tracking your vehicle in real-time, following its route on a map (GPRS connection and network coverage required).**

- **You can setup storage sequences in which you wish the Tracking device to store GPS positions to its memory. You can then use Control Base software or Tracking Websites to upload all data into the tracking history. You will also be able to configure sleeping modes for the GPS engine to reduce power consumption.**

12. Phone Call Operation

- **Apart from car security and vehicle tracking features, the SuperGuard Vehicle Unit is able to accept phone calls.**

  All incoming phone calls will be automatically accepted and connected after 20 seconds ring time.

  To hang up a phone call, simply press the SOS Emergency button once.

13. Retrieving Device IMEA Number

- **If the product key (IMEA number) printed on the device cover has been scratched or otherwise became illegible during installation or use, you will be able to retrieve this number through SMS command sent from one of the Contact Numbers or Control Base application.**
  - **NOTE: Required for online registration of devices**

  - **From the GSM phone, send the command by SMS:**

    $CGSN ➔ Enter GSM Number of Vehicle Unit ➔ Send

    You will receive an SMS from the device shortly (example):

350063008126500

14. Technical Specifications

SIZE (L/W/H): 144.5 x 71 x 38 mm

POWER SUPPLY: DC 9V ~ DC 16V

POWER CONSUMPTION (Spare Battery):

- 45mA ~ 55mA Standby current
- 100mA ~ 120mA operating (SMS)
- 250mA ~ 350mA operating (Talk time)
- 100mA ~ 150mA operating (GPRS online)

SPARE BATTERY: 7.2V 900 mAh

- Battery standby time: 9 hours (apprx.)
- Battery charging time: 2 hours (apprx.)

OPERATING TEMPERATURE: -20°C ~ +70°C

GSM MODULE: SIMCOM SIM340 (Quad Band)

- Operating Frequency:
  - GSM-850 (TX : 824Mhz ~849Mhz); (RX : 869Mhz ~894Mhz)
  - E-GSM-900 (TX : 880~915Mhz); (RX: 925Mhz ~ 960Mhz)
  - DCS-1800 (TX : 1710Mhz ~ 1785Mhz); (RX: 1805Mhz ~ 1880Mhz)
  - PCS-1900: (TX : 1850.2Mhz ~ 1909.8Mhz); (RX : 1930.2Mhz ~ 1989.8Mhz)
- TX Output Power:
  - GSM-850: Max: 33dBm ± 5dB ; Min: 5dBm ± 5dB
  - E-GSM-900: Max : 33dBm ± 5dB ; Min : 5dBm ± 5dB
  - DCS-1800 Max : 30dBm ± 5dB ; Min : 0dBm ± 5dB
  - PCS-1900: Max : 30dBm ± 5dB ; Min : 0dBm ± 5dB
- Sensitivity:
  - GSM-850: < -106 dBm
  - E-GSM-900: < -106 dBm
  - DCS-1800: < 104 dBm
  - PCS-1900 : < 104 dBm

GSM Application Programming Interface

AT Commands
UI APIs

GPS MODULE

- Chipset Solution: ATMEL SUPERSENSE ANTARIS4
- Center Frequency: 1575.42 MHz L1 band; C/A code
- Sensitivity: > -158 dBm
- Protocol: NMEA-0183 V3.0
- Projection: WGS-84

GPS ANTENNA:

- Frequency band: 1575.42 ± 2 Mhz
- Gain: +24 dBi
- Output Impedance: 50 Ω

INPUTS:

- SOS Emergency button
- RC Alarm In/ Arm (original car alarm signal)
- RC Alarm In/ Disarm (original car alarm signal)
- ACC (Alarm through Siren when turned on in Security)

OUTPUTS:

- Alarm Out to Siren
- Engine Out (relay to cut engine circuit)
- Lock Doors (door lock trigger)
- Unlock Doors (door unlock trigger)